

Message

From: Wilson, Kristina (DEQ) [WilsonK17@michigan.gov]
Sent: 4/3/2018 8:54:53 PM
To: Burdick, Melanie [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=bc0fae2c6b7a43ec8b577d3689229aea-MHaveman]
Subject: *deliberative* Exempt under FOIA Sec.13(1)(m)
Attachments: Aquila Draft Drawdown layer 6 after 16 years.pdf; Aquila Year 16 layer 7 drawdown in meters.pdf; Aquila Draft Drawdown layer 1 after 16 years.pdf

Importance: High

Melanie,

Attached are the model drawdown contours from the Foth MODFLOW model that has been run by MDEQ's Jill Van Dyke. Due to the numerous sources of information where the applicant states that the operations phase of the life of mine extends to 16 years, I asked Jill to extend the model run time to see how the drawdown responds to the extended timeframe. The attached figures are layers 1, 6 and 7 at 16 years. Please keep in mind that this model does not include any additional pumping that will likely be required at depths or volume greater than the existing proposed open pit. It would be prudent to assume that additional pumping will be required at greater depth to extend the life of mine through the proposed underground phase. Additionally, the scale of the model is in meters and the 0.152 contour line would be the 6 inch benchmark that we are considering an impact.

Please let me know if you have any questions.

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From: Van Dyke, Jill (DEQ)
Sent: Monday, March 19, 2018 12:03 PM
To: Wilson, Kristina (DEQ) <WilsonK17@michigan.gov>
Subject: Drawdown estimates extended to 16 years operation
Importance: High

Hi Kristi,

It looks like the model run matches the previous model up to 7 years. The extended model uses all the same parameters as the 7 year model, it is just extended in time.

I am attaching the simulations out to 16 years in Layers 1, 6, and 7. The drawdown extends the farthest into Wisconsin in the 16 year simulations from layers 6 and 7 as one would expect.

Jill

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